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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/667,235	09/22/2000	David M. Baggett	1956.0010000/PEG	1340
26111	7590	07/14/2005	EXAMINER	
STERNE, KESSLER, GOLDSTEIN & FOX PLLC 1100 NEW YORK AVENUE, N.W. WASHINGTON, DC 20005			WOO, RICHARD SUKYOON	
			ART UNIT	PAPER NUMBER
			3639	

DATE MAILED: 07/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/667,235	Applicant(s) BAGGETT ET AL.	
	Examiner Richard Woo	Art Unit 3639	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 April 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-64 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-64 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

- 1) Applicant's amendments filed on April 28, 2005 have been entered.
- 2) Applicant's arguments filed on April 28, 2005 have been fully considered but they are not persuasive.

In response to applicant's argument that the amendments to Claims have overcome the rejection under 35 U.S.C. 101, this is respectfully traversed by the examiner. Although the applicant's effort to amend the claims is greatly appreciated by the examiner, the amendment has been made to a preamble only. The claim body must include the significant recitation of the data processing system or calculating computing device.

In response to applicant's argument that DeMarcken does not disclose "determining amongst providing the second requestor with at least ONE OF the following ...", this is inconsistent with the amendment made to Claims 1 and 63 because the applicant allegedly deleted "one of" after "at least". Furthermore, determining to provide the second requestor with at least one of the real-time information and cached information (before amended) is deemed to be identical to determining amongst providing the second requestor with real-time information and cached information (currently amended). The determining step is still deemed to provide either real-time information or cached information, not both information simultaneously.

In response to applicant's arguments against the references individually (DeMarcken or Padmanabhan individually), one cannot show nonobviousness by

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attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

3) The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claim Rejections - 35 USC § 101

4) 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

5) Claims 1-63 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

In the present application, there is no significant change in the data or for performing calculation or computer implementation in the Claim. Although the claim is deemed to be directed to a computer-implement method, there is no significant recitation of a computer processor to perform all the recited steps as claimed by the applicant in the Claim body.

Claim Rejections - 35 USC § 102

6) Claims 1-4, 7-9, 14-16, 22, 25-27, 37, 43-53, 55, 58, 59, 63 and 64 are rejected under 35 U.S.C. 102(e) as being anticipated by DeMarcken et al. (WO 00/46715 A).

W.R.T. Claim 1:

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DeMarcken et al. discloses a method comprising the steps of:

receiving a first request from a first requestor for airline availability information (see abstract; page 7, lines 1-28; page 9, line 19 - page 12, line 3; page 12, line 32 - page 13, line 34; page 15, line 16 - page 15, line 32; and see Figs.);

querying one or more airline availability information sources for the requested airline availability information (see Id.);

receiving the requested airline availability information from the one or more airline availability information sources (see Id.);

caching the received airline information;

providing the received information to the requestor;

receiving a second query from a second requestor for the information (see Supra Response to the argument); and

determining to provide the second requestor with at least one of the following: real-time information, and cached information; and

providing information to the requestor (e.g., see Fig. 9).

W.R.T. Claim 2: DeMarcken et al. further discloses the method including: monitoring airline availability information traffic between an airline availability information source and one or more clients of the source (see abstract; page 7, lines 1-28; page 9, line 19 - page 12, line 3; page 12, line 32 - page 13, line 34; page 15, line 16 - page 15, line 32); and caching at least a portion of the monitored airline information.

W.R.T. Claim 3: DeMarcken et al. further discloses the method including: proactively

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generating one or more queries independent of requestor queries;

 sending the one or more proactively generated queries to an airline availability information source and caching information returned therefrom (see Id.).

W.R.T. Claim 4: DeMarcken et al. further discloses the method including: monitoring airline availability information traffic between an airline availability information source and one or more clients of the source (see abstract; page 7, lines 1-28; page 9, line 19 - page 12, line 3; page 12, line 32 - page 13, line 34; page 15, line 16 - page 15, line 32); caching at least a portion of the monitored airline information; proactively generating one or more queries independent of requestor queries; sending the one or more proactively generated queries to an airline availability information source and caching information returned therefrom (see Id.).

W.R.T. Claim 7: DeMarcken et al. further discloses the method including: proactively generating queries to populate cache (see Supra).

W.R.T. Claim 8: DeMarcken et al. further discloses the method including: proactively generating queries to update cached information (see Id.);

W.R.T. Claim 9: DeMarcken et al. further discloses the method including: ordering the proactive queries for processing based on time-to-departures and age of associated cached information (see abstract; page 7, lines 1-28; page 9, line 19 - page 12, line 3; page 12, line 32 - page 13, line 34; page 15, line 16 - page 15, line 32);

W.R.T. Claim 14: DeMarcken et al. further discloses the method including: receiving a second requestor preference for real-time information (or cached) ; and

 determining to provide the second requestor with real-time information (or

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cached) based at least in part on the second requestor preference (see Id.);

W.R.T. Claim 15: DeMarcken et al. further discloses the method wherein the step of determining step is based at least in part on one or more of the following: an availability of requested information in cache; a currently cached flight availability count; a client preference for cached/ real-time data; an age of the cached information; a client ID; a time; (see abstract; page 7, lines 1-28; page 9, line 19 - page 12, line 3; page 12, line 32 - page 13, line 34; page 15, line 16 - page 15, line 32);

W.R.T. Claim 16: DeMarcken et al. further discloses the method including: querying one or more information sources through one or more proxies (see Id.);

W.R.T. Claim 22: DeMarcken et al. further discloses the method including: receiving a first request from a first requestor for one or more of the following: hotel availability, rental car availability, taxi, entertainment, and restaurant availability (see Id.).

W.R.T. Claim 25: DeMarcken et al. further discloses the method including: caching recently updated information separately from less recently updated information and searching the recently updated cached information when real-time data is sought (see Supra).

W.R.T. Claim 26: DeMarcken et al. further discloses the method including: permitting the requestors to specify approximate departure times; and searching a cache for requested information .

W.R.T. Claim 27: DeMarcken et al. further discloses the method including: rounding-up actual departure times for each flight, providing at least the rounded-up actual departure time to a hashing function, and storing information associated with the flights in a hash

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table based on resulting rounded-up hash table indexes (page 7, lines 1-28; page 9, line 19 - page 12, line 3; page 12, line 32 - page 13, line 34; page 15, line 16 - page 15, line 32); rounding-down actual departure time for each flight, providing at least the rounded-down actual departure time to the hashing function, and storing information associated with the flights in the hash table based on resulting rounded-down hash table indexes; W.R.T. Claim 37: DeMarcken et al. further discloses the method including: sending the one or more proactively generated queries periods of low information source activity (see Id.);

W.R.T. Claim 43: DeMarcken et al. further discloses the method including: assigning priority to queries according to an associated market (see Supra);

W.R.T. Claim 44: DeMarcken et al. further discloses the method including: assigning priority to queries according to a frequency of flights (see abstract; page 7, lines 1-28; page 9, line 19 - page 12, line 3; page 12, line 32 - page 13, line 34; page 15, line 16 - page 15, line 32);

W.R.T. Claim 45: DeMarcken et al. further discloses the method including: assigning priority to queries according to a frequency of changes associated with availability of corresponding flights (see Id.);

W.R.T. Claim 46: DeMarcken et al. further discloses the method including: assigning priority to queries according to a market importance (see Id.);

W.R.T. Claim 47: DeMarcken et al. further discloses the method including: assigning priority to queries according to nearness of departure time (see abstract; page 7, lines 1-28; page 9, line 19 - page 12, line 3; page 12, line 32 - page 13, line 34; page 15, line

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16 - page 15, line 32);

W.R.T. Claim 48: DeMarcken et al. further discloses the method including: assigning priority to queries according to an age of cached data (see Supra);

W.R.T. Claim 49: DeMarcken et al. further discloses the method including: assigning priority to queries according to a number of remaining available seats (see Id.);

W.R.T. Claim 50: DeMarcken et al. further discloses the method including: assigning priority to queries according to anticipated increases in travel volume (see abstract; page 7, lines 1-28; page 9, line 19 - page 12, line 3; page 12, line 32 - page 13, line 34; page 15, line 16 - page 15, line 32);

W.R.T. Claim 51: DeMarcken et al. further discloses the method including: assigning priority to queries according to a type of product/service (see Id.);

W.R.T. Claim 52: DeMarcken et al. further discloses the method including: assigning lower priority to forms of ground transportation (see Id.);

W.R.T. Claim 53: DeMarcken et al. further discloses the method including: assigning lower priority to flights that use propeller planes (see abstract; page 7, lines 1-28; page 9, line 19 - page 12, line 3; page 12, line 32 - page 13, line 34; page 15, line 16 - page 15, line 32);

W.R.T. Claim 55: DeMarcken et al. further discloses the method including: updating cached airline availability information according to multiple priorities (see Id.);

W.R.T. Claim 58: DeMarcken et al. further discloses the method including: predicting an availability status (see Id.); and

W.R.T. Claim 59: DeMarcken et al. further discloses the method including: predicting

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availability status based on prior observed variables, including prior availability information (page 7, lines 1-28; page 9, line 19 - page 12, line 3; page 12, line 32 - page 13, line 34; page 15, line 16 - page 15, line 32).

W.R.T. Claim 63:

DeMarcken et al. discloses the method comprising the steps of:

- receiving a first request from a first requestor;
- querying one or more information sources for the requested information;
- receiving the requested information from the source;
- caching the received information;
- providing the information to the requestor;
- receiving the second query from a second requestor;
- determining to provide the second requestor with at least one or the following types of information (real-time and cached information);
- providing information to the requestor in accordance with the determination (see abstract; page 7, lines 1-28; page 9, line 19 - page 12, line 3; page 12, line 32 - page 13, line 34; page 15, line 16 - page 15, line 32; see Supra Claim 1 and response to the argument).

W.R.T. Claim 64:

DeMarcken et al. discloses a computer program product including:

- a receiving function that causes the system to receive requests for

information from requestors;

a query process function that causes the system to determine whether to process a query out-of-cache or with real-time information, and that causes the system to query one or more information sources when it determines to process a query with real-time information; and

a cache control function that causes the system to cache information returned from the sources (see abstract; page 7, lines 1-28; page 9, line 19 - page 12, line 3; page 12, line 32 - page 13, line 34; page 15, line 16 - page 15, line 32; see *Supra* Claim 1 and response to argument).

Claim Rejections - 35 USC § 103

7) Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over DeMarcken et al. in view of "Using Predictive Prefetching to improve world wide web latency" (Padmanabhan V N et al.).

DeMarcken et al. discloses the invention as cited above but does not specifically disclose the method including: adding the requestor queries to a query priority queue; adding proactively generated queries to the query priority queue, at lower priorities than the requestor queries; and processing the requestor queries and the proactively generated queries according to their priorities.

Padmanabhan V N et al. teaches for a method for interfacing between a plurality

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of requestors and sources, including: adding the requestor queries to a query priority queue; adding proactively generated queries to the query priority queue, at lower priorities than the requestor queries; and processing the requestor queries and the proactively generated queries according to their priorities (see abstract; page 26, line 4 - page 26, line 14; page 29, line 33 - page 30, line 11; and page 34, line 18 - page 35, line 7).

It would have been obvious to include the steps of: adding the requestor queries to a query priority queue; adding proactively generated queries to the query priority queue, at lower priorities than the requestor queries; and processing the requestor queries and the proactively generated queries according to their priorities, as taught by Padmanabhan V N et al., for the purpose of providing a substantial reduction in latency perceived by a requestor in terms of the average time to access a file.

Allowable Subject Matter

8) Claims 6, 10-13, 17-21, 23-24, 28-36, 38-42, 54, 57, and 60-62 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 101, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Richard Woo whose telephone number is 571-272-6813. The examiner can normally be reached on Monday-Friday from 8:30 AM -5:00 PM.

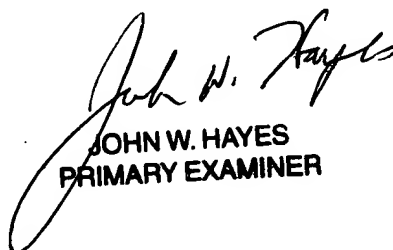
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Hayes can be reached on 571-272-6708. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Richard Woo
Art Unit 3639
July 11, 2005



JOHN W. HAYES
PRIMARY EXAMINER